

What is claimed is:

1. An information display device comprising a content considering resizing unit and a display unit for displaying an image, wherein

the content considering resizing unit selects a combination of image processing methods for the image based on a content description file containing information relating to materials contained in the image, an object distance contained in the image, and a usage of the image; decides parameters of the selected combination of image processing methods using a target image size of the image and the content description file; and changes a size of an image after image processing by the combination of image processing methods the parameters of which are adjusted into the target image size; and

the display unit displays the image after the change in size to the target image size.

2. The information display device according to claim 1, further comprising a user preference database for storing user preference information containing at least one of a user preference, an image display history, a user's age, a presence of visual handicap, and visual power, wherein

the parameters of the selected combination of image processing methods are decided by also using the user preference information.

3. The information display device according to claim 1, further comprising a user input unit for outputting an image emphasis degree change signal which is a signal indicating a feel of a material in an image input by a user, wherein the parameters of the selected combination of image processing methods are decided by also using the image emphasis degree change signal.

4. The information display device according to claim 1, further comprising:

a terminal ambient environment acquisition unit for measuring terminal ambient environment conditions indicating ambient illumination conditions of the display unit; and

a terminal ambient environment database for storing the terminal ambient environment conditions, wherein

the parameters of the selected combination of image processing methods are decided by also using the terminal ambient environment conditions.

5. The information display device according to claim 1, further comprising:

a terminal characteristics database for storing terminal characteristics which are information including a manufacturer, a product number, numbers of pixels in height and width, a resolution, color characteristics, and a usable format of the display unit, wherein

the parameters of the selected combination of image

processing methods are decided by also using the terminal characteristics.

6. The information display device according to claim 1, further comprising:

a color management unit and a transcoding unit, wherein the color management unit uses a color management profile of an image input unit for reading a image to convert color information of the image into an independent color space independent from the image input unit and the display unit and further converts a color space of the image after the image processing by the combination of image processing methods into a color space of the display unit;

the transcoding unit converts into a predetermined format the image after the image processing by the combination of image processing methods and the color space conversion;

the content considering resizing unit outputs the image after the conversion into the independent color space and the image processing by the combination of image processing methods to the color management unit; and

the display unit displays the image after the conversion into the predetermined formant.

7. The information display device according to claim 6, wherein

the color management unit converts the image after the image processing by the combination of image processing

methods into the color space of the display unit by using the color characteristics and the terminal ambient environment conditions of the display unit.

8. An information processor comprising a content considering resizing unit, wherein

the content considering resizing unit selects a combination of image processing methods for an image according to a content description file containing information including a material contained in the image, an object distance contained in the image, and a usage of the image; decides parameters of the selected combination of image processing methods using a target image size of the image and the content description file; and changes a size of an image obtained after image processing by the combination of image processing methods for which the parameters are adjusted into the target image size.

9. The information processor according to claim 8, wherein

the parameters of the selected combination of processing methods are decided by also using user preference information containing at least one of a user preference, an image display history, a user's age, a presence of visual handicap, and visual power.

10. The information processor according to claim 8, wherein

the parameters of the selected combination of processing methods are decided by also using an image emphasis degree change signal indicating a feel of material of an image input by the user.

11. The information processor according to claim 8, wherein

the parameters of the selected combination of processing methods are decided by also using terminal ambient environment conditions indicating ambient illumination conditions of the display unit for displaying the image.

12. The information processor according to claim 8, wherein

the parameters of the selected combination of processing methods are decided by also using terminal characteristics which are information containing a manufacturer, a product number, numbers of pixels in height and width, a resolution, color characteristics, and a usable format.

13. The information processor according to claim 8, further comprising:

a color management unit and a transcoding unit, wherein the color management unit uses a color management profile of an image input unit for reading an image to convert color information of the image into an independent color space independent from the image input unit and the display unit and further converts a color space of the image after the image

processing by the combination of image processing methods into a color space of the display unit;

the transcoding unit converts into a predetermined format the image after the image processing by the combination of image processing methods and the color space conversion; and

the content considering resizing unit outputs the image after the conversion into the independent color space and the image processing by the combination of image processing methods to the color management unit.

14. The information processor according to claim 13, wherein

the color management unit converts the image after the image processing by the combination of image processing methods into the color space of the display unit by using the color characteristics and the terminal ambient environment conditions of the display unit.

15. An information processing system comprising:

an information display device; and

an information provider device having an image database in which images each containing a content description file are accumulated, wherein

the information display device has a content considering resizing unit and a display unit for displaying an image,

the content considering resizing unit selecting a

combination of image processing methods for the image according to a content description file containing information including a material contained in the image, an object distance contained in the image, and a usage of the image; deciding parameters of the selected combination of image processing methods using a target image size of the image and the content description file; and changing a size of an image obtained after image processing by the combination of image processing methods the parameters for which are adjusted into the target image size, and

the display unit displaying the image after the change in size to the target image size.

16. An information processing system comprising:

an information processor; and

an information display device including a display unit for displaying an image; wherein

the information processor has a content considering resizing unit,

the content considering resizing unit selecting a combination of image processing methods for the image according to a content description file containing information including a material contained in the image, an object distance contained in the image, and a usage of the image; deciding parameters of the selected combination of image processing methods using a target image size of the image and

the content description file; and changing a size of an image obtained after image processing by the combination of image processing methods for which the parameters are adjusted into the target image size.

17. An information display device comprising:

a display unit for displaying an image;

a terminal ambient environment acquisition unit for measuring terminal ambient environment conditions indicating ambient illumination conditions of the display unit;

a terminal ambient environment database for storing the terminal ambient environment conditions;

a user input unit to be used by a user for designating a demanded image which is an image to be displayed on the display unit, the user input unit outputting an image demand signal which is a signal for demanding the demanded image;

a terminal characteristics database for accumulating terminal characteristics which are information including a manufacturer, a product number, numbers of pixels in height and width, a resolution, color characteristics, and a useable format; and

an information transmitter receiver unit for transmitting the terminal characteristics, the terminal ambient environment conditions, and the image demand signal and receiving the demanded image which is adapted for the display unit in accordance with the terminal characteristics

and the terminal ambient environment conditions.

18. The image display device according to claim 17, further comprising a user preference database for storing user preference information containing at least one of a user preference, an image display history, a user's age, presence of visual handicap, and visual power, wherein

the user input unit outputs also the user preference information which is input by the user to the user preference database;

the information transmitter receiver unit transmits also the user preference information to receive the demanded image adapted for the display unit including the user preference information.

19. The image display device according to claim 17, wherein

the user input unit outputs also an image emphasis degree change signal which is a signal indicating feel of material of a demanded image input by the user to the information transmitter receiver unit; and

the information transmitter receiver unit transmits also the image emphasis degree change signal to receive a demanded image adapted in view of the image emphasis degree change signal for the display unit.

20. The image display device according to claim 17, further comprising:

a processing database storing a combination of image processing methods which is decided according to the terminal characteristics and the terminal ambient environment conditions;

a color management unit;

a content considering resizing unit; and

a transcoding unit, wherein

the color management unit converts the demanded image into a color space independent from the image input unit and the display unit according to the color management profile of the demanded image and, also, converts the demanded image which is subjected to the combination of image processing methods into a color space of the display unit;

the content considering resizing unit decides a changed image size which is an image size to which a size of the demanded image is changed depending on the resolution and the numbers of pixels in height and width of the display unit; selects the combination of image processing methods according to a content description file which is information relating to a material contained in the demanded image, an object distance in the demanded image, and a usage of the demanded image; decides parameters of the combination of image processing methods according to an image size of the demanded image and the content description file; applies the combination of image processing methods the parameters of which are adjusted to the demanded

image of which the color space is changed by the color management unit; and changes the size of the demanded image after applying the combination of image processing methods into the changed image size; and

the transcoding unit converts the demanded image after converted into the color space of the display unit by applying the combination of image processing methods into a usable format.

21. The image display device according to claim 20, wherein

the color management unit converts the demanded image into the color space independent from the image input unit and the display unit in accordance with the color management profile and converts the demanded image into the color space of the display unit in accordance with the color characteristics and the terminal ambient environment conditions of the display unit.

22. The image display device according to claim 17, further comprising;

a processing database for deciding an image processing item in accordance with the terminal characteristics and the terminal ambient environment conditions;

an image conversion unit for selecting a combination of image processing methods in accordance with the terminal characteristics, deciding parameters of the combination of

image processing methods in accordance with the terminal ambient environment conditions and the content description file, and applying the combination of image processing methods the parameters of which are adjusted to the demanded image; and

a transcoding unit for converting the demanded image after applying the combination of image processing methods into a usable format.

23. An information processor comprising:

a delivery unit to which an image demand signal, terminal characteristics, and terminal ambient environment conditions are input;

a processing database accumulating a combination of image processing methods decided in accordance with the terminal characteristics and the terminal ambient environment conditions;

a color management unit for converting the demanded image into a color space independent from the image input unit and the display unit in accordance with a color management profile and, further, converts the demanded image after applying the combination of image processing methods into a color space of the display unit;

a content considering resizing unit for deciding a changed image size in accordance with a resolution and numbers of pixels in height and width of the display unit, selecting

the combination of image processing methods in accordance with a content description file, deciding parameters of the combination of image processing methods in accordance with a size of the demanded image and the content description file, applying the image processing methods the parameters of which are adjusted to the demanded image of the independent color space, and changing the demanded image after applying the combination of image processing methods into the changed image size; and

a transcoding unit for converting the demanded image after performing the conversion into the color space of the display unit and the combination of image processing methods into a usable format, wherein

the delivery unit outputs the demanded image after performing the conversion into the color space of the display unit and the combination of image processing methods.

24. The information processor according to claim 23, wherein

the color management unit converts the demanded image into the color space independent from the image input unit and the display unit in accordance with the color management profile and converts the demanded image into the color space of the display unit in accordance with the terminal characteristics and the terminal ambient environment conditions of the display unit.

25. An information processor comprising:

a delivery unit to which an image demand signal, terminal characteristics, and terminal ambient environment conditions are input;

an image processing database for accumulating a plurality of images with each of which a content description file and a color management profile are stored and outputting a demanded image indicated by the image demand signal;

a processing database accumulating a combination of image processing methods decided in accordance with the terminal characteristics and the terminal ambient environment conditions;

an image conversion unit for selecting a combination of image processing methods for the demanded image read out from the image database in accordance with the terminal characteristics, deciding parameters of the combination of image processing methods in accordance with the terminal ambient environment conditions and the content description file, and applying the image processing methods the parameters of which are adjusted to the demanded image; and

a transcoding unit for converting the demanded image after applying the combination of image processing methods into a usable format, wherein

the delivery unit outputs the demanded image after the conversion into the usable format.